MARY LEE H. PICOU

IBLA 84-890

Decided September 26, 1985

Appeal from a decision of the Wyoming State Office, Bureau of Land Management, rejecting noncompetitive oil and gas lease offer. W-86874.

Affirmed.

1. Oil and Gas Leases: Applications: Generally -- Oil and Gas Leases: Known Geologic Structure -- Oil and Gas Leases: Noncompetitive Leases

Under 30 U.S.C. § 226(b) (1982), lands within the known geologic structure of a producing oil or gas field may be leased only by competitive bidding. Where lands are determined to be within such a structure after a simultaneous oil and gas lease drawing but prior to issuance of a lease, a noncompetitive lease offer for such lands must be rejected.

2. Oil and Gas Leases: Applications: Generally -- Oil and Gas Leases: Known Geologic Structure -- Oil and Gas Leases: Noncompetitive Leases

An applicant for a noncompetitive oil and gas lease who challenges a determination that certain lands are within the known geologic structure of a producing oil or gas field has the burden of showing that the determination is in error. Where the applicant fails to show error, the determination will be upheld.

APPEARANCES: Mary Lee H. Picou, <u>pro se</u>; Lowell L. Madsen, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Denver, Colorado, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE GRANT

Mary Lee H. Picou has appealed from a decision of the Wyoming State Office, Bureau of Land Management (BLM), dated August 13, 1984, rejecting her noncompetitive oil and gas lease offer W-86874.

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Appellant was the first-drawn applicant for parcel WY-405 in the July 1983 simultaneous oil and gas lease drawing. By decision dated November 1, 1983, BLM required appellant to submit executed lease offer forms and the first year's rental payment "within 30 days from the date of your receipt of this decision." On November 10, 1983, appellant submitted the required lease offer forms for 320 acres of land situated in the S 1/2 sec. 22, T. 21 N., R. 90 W., sixth principal meridian, Sweetwater County, Wyoming, and paid the first year's rental. By memorandum dated July 24, 1984, the District Manager, Rawlins District, notified the State Director that lease offer W-86874 was within the Washakie Basin known geologic structure (KGS), effective June 14, 1984. In its August 1984 decision, BLM rejected appellant's lease offer pursuant to 43 CFR 3112.5-2(b) because the land was situated within an undefined KGS and, thus, was subject to leasing only by competitive bidding under 43 CFR Subpart 3120.

In her statement of reasons for appeal, appellant contends that the land involved herein is not properly determined to be within a KGS. Appellant submits an evaluation of the land dated August 24, 1984, prepared by Gordon N. Blair, a consulting geologist, which concluded that: "[L]ands in W-86874 have some speculative hydrocarbon potential but regional geologic trends and drilling in nearby areas suggests that thick channel sands are absent and potential reservoirs are only in erratic, narrow, barrier type stringer sands." In his report, Blair stated that he had learned from BLM personnel that the Washakie Basin KGS was based on the presence of "gas bearing sands within a thick 'Lewis shale' sequence," but that, in his opinion, it is "more likely" the land involved herein is underlain by a "considerably 'tighter' Lewis shale sequence with much thinner and more erratic sand development." Blair referred to two isopach maps "of two intervals in the Lewis shale, [which] indicate that [the] subject tract lies between two major areas of potential reservoir development, the 'Red Desert' and 'Dad' deltas."

Blair also discussed the results of drilling done in a 6-mile radius around the land involved herein, which tested zones "in or above the Lewis with widely varied results." Blair referred first to a well drilled 2 miles to the northeast, which was completed in the Ericson formation with 1003 thousand cubic feet of gas (MCFG) produced per day, and a nearby "extension" well, which realized a "flow" of 106 MCFG. Blair also stated there are "abandoned Lewis tests" in secs. 12 and 25, T. 21 N., R. 91 W., and an "abandoned wildcat" in sec. 19, T. 21 N., R. 90 W., sixth principal meridian, Wyoming. Further, a well drilled 4 miles to the southwest "tested a thin channel sand in the 'Almond' formation and recovered only 305 MCFG," and 6 miles to the south and 3 miles to the southeast there are, respectively, an abandoned "Ericson test" and an abandoned "wildcat." Blair concluded that the "likelihood of striking hydrocarbon reserves within the Lewis sequence here is as remote as in other 'rank wildcat' areas of Wyoming."

In response to appellant's statement of reasons, BLM states that it has reviewed the geologic evaluation prepared by Blair and "found nothing * * * to persuade it that its prior determination was not proper." BLM states that the Washakie Basin's oil and gas potential is based on "several geological formations," i.e., Lewis, Almond, and Ericson, and that the Almond formation was the

"main geologic formation that was used to establish the limits of [the] KGS." BLM notes the land involved herein lies within an area "where the upper Almond formation sand is at least 20 feet thick, and over 10 feet of this sand has a porosity of 6% or more." Further, BLM asserts that 80 percent of the wells drilled in the Washakie Basin have been "producers," with much of the remainder having "evidence of free gas." BLM submits a portion of the record upon which the KGS determination involved herein was based, which states that "[t]hroughout the Washakie Basin, the sandstone that makes up the upper portion of the Almond Formation accounts for the majority of the production," and that this formation extends further ("roughly north-south for 50 or more miles") and is wider than previously reported. This report also states that: "Although each [Lower Almond] sandstone reservoir may be lenticular and discontinuous these sandstones are stacked one above another. Therefore, the probability of penetrating a productive reservoir sandstone is very high anywhere in this Basin." Finally, the report indicates that BLM relied on "isopachous maps" and was aware of all of the wells mentioned by appellant.

- [1] Section 17 of the Mineral Leasing Act, as amended, 30 U.S.C. § 226(b) (1982), provides that public domain lands within the KGS of producing oil or gas field "shall be leased * * * by competitive bidding." Where lands embraced in a noncompetitive oil and gas lease offer are designated as within a KGS prior to issuance of the lease, the offer must be rejected. Carolyn J. McCutchin, 86 IBLA 13 (1985). The Department has no discretion to issue a noncompetitive oil and gas lease for KGS lands. McDade v. Morton, 353 F. Supp. 1006 (D.C. Cir. 1973), affd, 494 F.2d 1156 (D.C. Cir. 1974).
- [2] Appellant has challenged the determination that the land involved herein is situated within a KGS. The burden of proving that the KGS determination is in error is on appellant. R. K. O'Connell, 85 IBLA 29 (1985). A KGS is defined as "technically the trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.0-5(1). A KGS designation recognizes the existence of a continuous entrapping structure on some part of which there is production. 1/ It does not indicate what is known of the productivity of all of the lands in the structure, nor does it predict future productivity. Lloyd Chemical Sales, Inc., 82 IBLA 182 (1984).

Appellant relies solely on the evaluation prepared by Blair to dispute BLM's KGS determination. Blair's evaluation was based on the "remote" likelihood of striking hydrocarbon reserves in the "Lewis shale' sequence." In particular, Blair relied on an electric log cross-section running east-west to the south of parcel WY-405, which is north of the eastern end of the cross-section. This cross-section indicates the bed of porous sandstone in the Lewis formation gets progressively thinner as it passes south of the parcel. However, the portion of the record submitted by BLM indicates the relevant KGS determination

 $[\]underline{1}$ / This Board has previously had occasion to affirm the finding of a KGS in circumstances where the productive formation consists not of one homogeneous sandstone body, but of numerous discrete lenticular sandstone bodies bearing hydrocarbons. R. K. O'Connell, supra.

was based on the porous sandstone occurring not only in the Lewis formation, but also in the Almond and Ericson formations. Appellant has submitted no evidence that these formations do not underlie parcel WY-405, or that the porous sandstone within all of these formations is thin and erratic. A KGS will not be redefined "until all sands or formations therein having prospective value for oil and gas have been exhausted or proved barren." K. S. Albert, 60 I.D. 62, 63 (1947).

Appellant's consultant, Blair, considered eight wells drilled within a 6-mile radius of appellant's lease offer. As noted previously, two of the wells (approximately 2 and 3 miles distant) flowed 1,003 MCFG per day and 106 MCFG per day, respectively, from the Ericson formation. Four miles to the southwest of W-86874, a well test recovered 305 MCFG per day from the Almond formation. Because of the presence of several formations underlying parcel WY-405 which have been shown to be productive at various points in that area, we conclude that appellant has not overcome the evidence that the land is at least "presumptively productive" of oil or gas.

Accordingly, we conclude that BLM properly rejected appellant's non-competitive oil and gas lease offer for land within the Washakie Basin KGS. <u>See Evelyn D. Ruckstuhl</u>, 85 IBLA 69 (1985).

Pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

C. Randall Grant, Jr. Administrative Judge

We concur:

Gail M. Frazier Administrative Judge

Bruce R. Harris Administrative Judge

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